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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,770	12/13/2000	Moon-Soo Yoo	J4-K10	6598

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Stephen J. Koundakjian  
P.O. Box 758  
South Pasadena, CA 91031-0758

EXAMINER

PAREKH, ANKUR

ART UNIT

PAPER NUMBER

3681

DATE MAILED: 03/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/735,770

Applicant(s)

YOO, MOON-SOO

Examiner

Ankur Parekh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

1. This is the first Office action on the merits of Application No. 09/735,770 filed Dec 13, 2000. Claims 1-15 are pending.

#### ***Specification***

2. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

#### ***Claim Objections***

3. Claims 1-15 are objected to because they are *replete* with grammatical and idiomatic errors. Some examples of grammatically incorrect phrases in claim 1 are: A. "and a plurality of planetary gears is installed" (line 5); B. "at least two sun gears that are engaging with each step of the planetary gears" (line 7); C. "ratchet-teeth is formed along inner circumference" (line 8); and D. "a clutch means that is mediating the driving force selectively with being mounted between the carrier and the hub shell, and the ring gear and the hub shell" (line 13). Many of the errors have to do with the use of verbs. The claims are replete with the improper use of the infinitive form of a verb preceded by a form of the helping verb "to be." For example, "are engaging" in line 7 should be "engage." All of the claims should be carefully rewritten so that they are grammatically correct.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "each step" in line 7. There is insufficient antecedent basis for this limitation in the claim.

It is not clear from the recitation "and ratchet-teeth is formed along inner circumference" in line 8 of claim 1 whether both or merely one of the at least two sun gears have ratchet teeth on their inner circumferences.

The meaning of "selectively" in line 13 of claim 1 is not clear.

The meaning of "original position" in line 27 of claim 1 is not clear.

The meaning of "rotate freely" in line 28 of claim 1 is not clear. Does applicant mean that the transforming disk can rotate without transferring the rotation to the mediating portion and the pawl controlling ring?

Regarding claim 3, it is not clear how the grooves of the pawl-controlling ring can be symmetrical with respect to the center point (as required by claim 2 upon which claim 3 depends) when the grooves are not formed with the same angle interval with respect to the center point.

Regarding claim 4, it is not clear how a "sloping groove" differs from and "angular groove."

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Regarding claim 4, the meaning of "relatively far" is not clear. It is also not clear whether the claim is reciting that all of pawls have the extending portion or that only those pawls which are "relatively far" from the pawl-controlling ring have the extended portion.

Regarding claim 11, it is not clear whether the claim limits the invention to an apparatus having more than two sets of pawls.

### ***Allowable Subject Matter***

6. Claims 1-15 would be allowable if rewritten or amended to overcome the claims objections and the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

### ***Cited Art***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note the bicycle change speed devices in Nagano ('500), Rohloff ('287), Rohloff ('005), Huang et al. ('530), and Takamiya et al. ('122). The transmission of Matsuo et al. ('625) uses a roller one-way-clutch between the carrier and the hub and between the ring gear and the hub (as opposed to a one-way-clutch employing a ratchet and a pawl).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ankur Parekh whose telephone number is (703) 305-

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3795. The examiner can normally be reached on Monday through Friday, 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (703) 308-0830. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3597 for regular communications and (703) 305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.



Ankur Parekh  
February 28, 2002